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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,050	12/28/2001	Richard E. Smalley	11321-P012USD5	8600
47744	7590	04/28/2005	EXAMINER	
ROSS SPENCER GARSSON WINSTEAD SECHREST & MINICK P.C. P. O. BOX 50784 DALLAS, TX 75201			HENDRICKSON, STUART L	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,050

Applicant(s)

SMALLEY ET AL

Examiner

Stuart Hendrickson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 81-90, 104, 105, 111 and 112 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 81-87, 104, 105, 111 and 112 is/are rejected.
- 7) ☒ Claim(s) 88-90 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1754

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The request filed on 1/18/05 for Continued examination (RCE) based on parent Application No. 10/033050 is acceptable and has been established. An action on the CPA follows.

Claims 81-87 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ajayan et al. Science.

The reference teaches SWNTs of the claimed length. This does not discuss the number of nanotubes, however they are made in bulk so it appears that the claimed number are made. In any event, the amount of a material does not impart patentability; In re Rose 105 USPQ 137.

Claims 104, 105, 111, 112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ajayan et al. taken with applicant's admissions.

The reference does not teach the claimed uses, however these are obvious as means to exploit the well-established emitter and electronic properties of carbon nanotubes. The applicant admits in the specification that the non-nanotube structures recited in the claims are old and known.

Applicant's arguments filed through 1/18/05 have been fully considered but they are not persuasive.

The claims have not been narrowed to the argued feature that all the nanotubes present are aligned and have the same size. Note pg. 1212 bottom right. **Specification pg. 33 should be resubmitted. The Hirsch reference should be submitted.**

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.



Stuart Hendrickson
examiner Art Unit 1754